



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,101	11/03/2006	Norio Teramae	3716638-00002	4072
24573	7590	09/16/2010	EXAMINER	
K&L Gates LLP P.O. Box 1135 CHICAGO, IL 60690				WILDER, CYNTHIA B
ART UNIT		PAPER NUMBER		
1637				
			NOTIFICATION DATE	
			DELIVERY MODE	
			09/16/2010	
			ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

chicago.patents@klgates.com

ATTACHMENT TO ADVISORY ACTION

1. Applicant amendment after-final filed 8/26/2010 is acknowledged and will be entered. Claims 12-26 are pending. Claims 21-26 are withdrawn from consideration as being drawn to a non-elected invention. Applicant's request for reconsideration is acknowledged and discussed below. The examiner's response to Applicant's remarks appears below.

Applicant's Traversal

2. Applicant traverses the rejection on the following grounds: Applicant summarizes the rejection and states that the technology in Bao requires the attachment of the fluorescent material to the two kinds of molecule beacons of the donor beacon and the acceptor beacon. Applicant states accordingly, in such technology, it is necessary that complicated operations for detecting the target base and cost becomes higher by attachment of the fluorescent material. Applicant states that detecting the gene mutation with ease and low cost cannot be realized. Applicant states that the technology described in Yoshimoto et al relates to a nucleic acid base using DNA chain containing AP-site. Applicant states that Yoshimoto requires a complicated operation such as introducing the AP-site in the detecting nucleic acid and therefore it is not possible to realize detection of gene mutation in a simple and cost effective manner. Applicant state that in the present application as embodied by the claimed invention, neither the chemical modification such as attachment of the fluorescent material nor the chemical modification such as introducing previously a special part such as AP site in the single stranded target nucleic acid is necessary. Applicant states that Boa and

Yoshimoto are not combinable and therefore fails to teach or suggest the claimed invention specifically because they are directed to separate and distinct operations with separate and distinct objectives. Applicant concludes that consequently, it does not seem reasonable to combine Yoshimoto with Bao, even if combinable.

Examiner's Response

3. All of the arguments have been thoroughly reviewed and considered but are not found persuasive. In response to applicant's arguments, it is noted that Applicant's arguments are not commensurate in scope with the claims because the claims comprises open language in the recitation of "comprising" which does not exclude unwanted or unnecessary method steps recited in the prior art as argued by Applicant. Therefore, this arguments is not found persuasive.

In response to Applicant's arguments concerning the advantages of the instant invention over the cited prior art, this argument is not persuasive, because the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). In this case, this is especially true as neither the claims nor specification provides any evidence of unexpected results based on ease of detecting gene mutation and realization of low cost as argued by Applicant. MPEP states that "objective evidence which must be factually supported by an appropriate affidavit or declaration to be of probative value includes evidence of unexpected results, commercial success, solution of long-felt need, inoperability of the prior art, invention before the date of the

reference, and allegations that the author(s) of the prior art derived the disclosed subject matter from the applicant. See, for example, *In re De Blauwe*, 736 F.2d 699, 705, 222 USPQ 191, 196 (Fed. Cir. 1984).

In response to Applicant's arguments that the references are not combinable, it is noted that Applicant provides no evidence to support this conclusion and therefore, this argument is not found persuasive. Applicant is reminded that the Courts have established that "[A]n "obviousness finding was appropriate where the prior art 'contained *detailed enabling methodology* for practicing the claimed invention, a suggestion to modify the prior art to practice the claimed invention, and evidence suggesting that it would be successful.'" *In re Kubin*, 561 F.3d 1351, 1360 (Fed. Cir. 2009) (citing *In re O'Farrell*, 853 F.2d 894, 902 (Fed. Cir. 1988)). The court commented that "[r]esponding to concerns about uncertainty in the prior art influencing the purported success of the claimed combination, this court [in *O'Farrell*] stated: '[o]bviousness does not require absolute predictability of success ... *all that is required is a reasonable expectation of success.*'" *Kubin*, 561 F.3d at 1360 (citing *In re O'Farrell*, 853 F.2d at 903-904). It is the Examiner's position that the cited prior art provides sufficient evidence that one could expect a reasonable expectation of success in obtaining the claims invention using the combination of Boa et al in view of Yoshimoto as discussed in the prior Office action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CYNTHIA B. WILDER whose telephone number is (571)272-0791. The examiner can normally be reached on a flexible schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached on (571) 272-0782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/GARY BENZION/
Supervisory Patent Examiner, Art Unit 1637